Parameters of Probe: EX3DV4 - SN:7608

Calibration Parameter Determined in HSL

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc[H] ($k = 2$)
750	41.9	0.89	9.92	9.85	9.06	0.36	1.27	±11.0%
900	41.5	0.97	9.15	9.08	8.35	0.36	1.27	±11.0%
1450	40.5	1.20	7.94	7.89	7.25	0.36	1.27	±11.0%
1750	40.1	1.37	8.01	7.95	7.31	0.36	1.27	±11.0%
1900	40.0	1.40	7.73	7.68	7.06	0.36	1.27	±11.0%
2000	40.0	1.40	7.55	7.50	6.90	0.35	1.27	±11.0%
2300	39.5	1.67	7.55	7.49	6.89	0.35	1.27	±11.0%
2450	39.2	1.80	7.57	7.51	6.91	0.35	1.27	±11.0%
2600	39.0	1.96	7.48	7.43	6.83	0.35	1.27	±11.0%
3500	37.9	2.91	6.57	6.52	6.00	0.35	1.27	±13.1%
3700	37.7	3.12	6.50	6.45	5.94	0.35	1.27	±13.1%
3900	37.5	3.32	6.48	6.43	5.91	0.35	1.27	±13.1%
4100	37.2	3.53	6.24	6.20	5.70	0.35	1.27	±13.1%
5250	35.9	4.71	5.71	5.67	5.21	0.31	1.27	±13.1%
5600	35.5	5.07	5.31	5.28	4.85	0.28	1.27	±13.1%
5750	35.4	5.22	5.23	5.19	4.77	0.26	1.27	±13.1%

[C] Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ε and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

[H] The stated uncertainty is the total calibration uncertainty ($k = 2$) of Norm·ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

Parameters of Probe: EX3DV4 - SN:7608

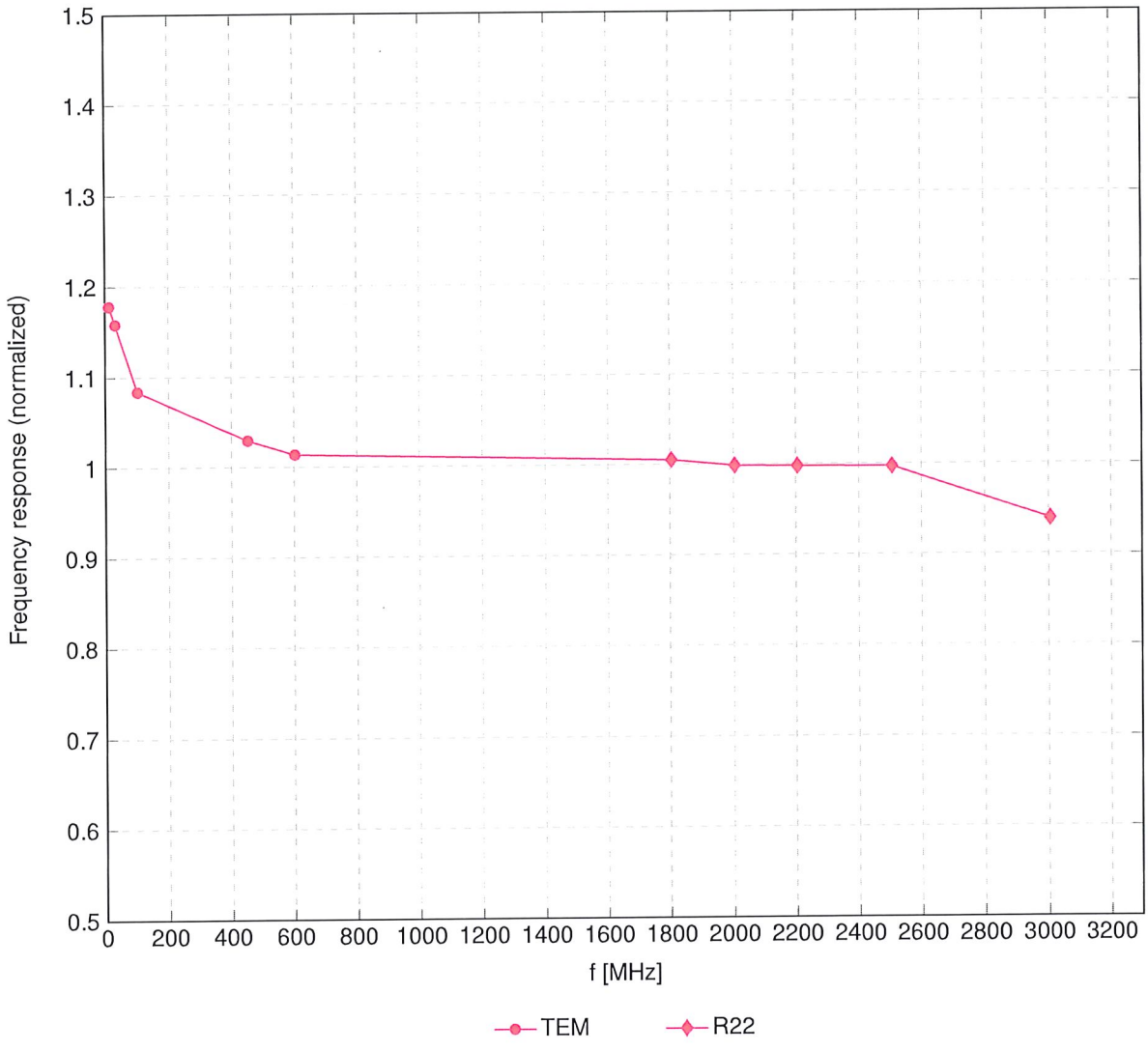
Calibration Parameter Determined in HSL

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc[H] ($k = 2$)
6500	34.5	6.07	5.39	5.35	4.92	0.20	1.27	±18.6%

[C] Frequency validity at 6.5 GHz is −600/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ε and σ by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.
[H] The stated uncertainty is the total calibration uncertainty ($k = 2$) of Norm·ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

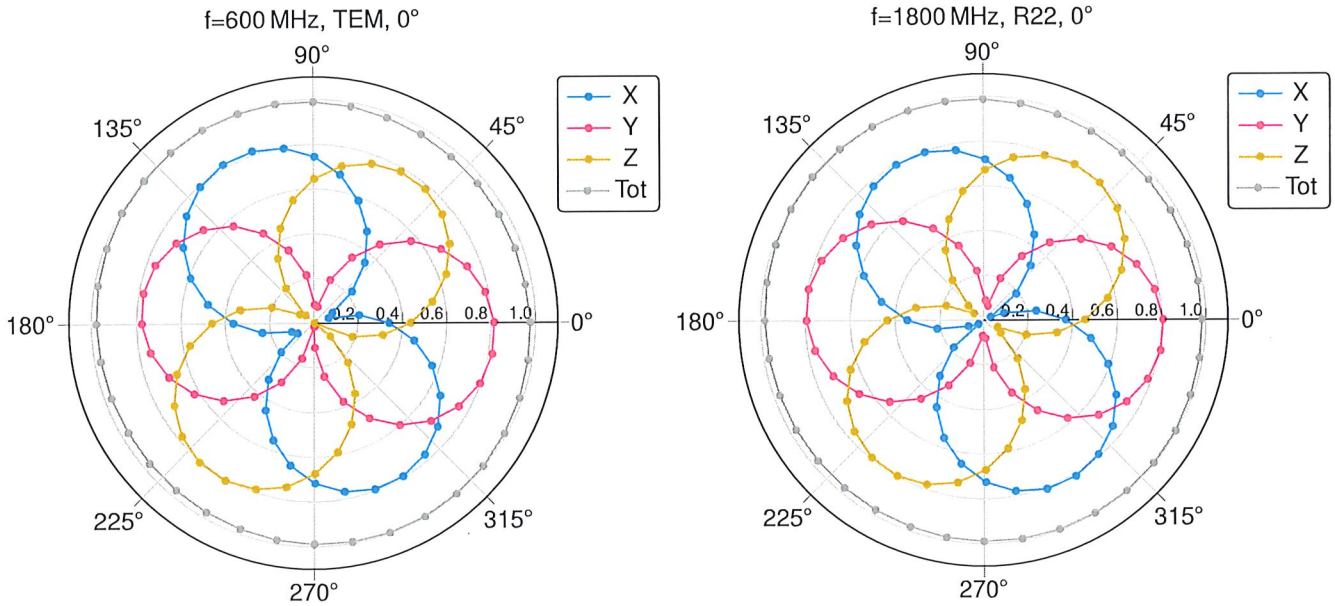
Frequency Response of E-Field

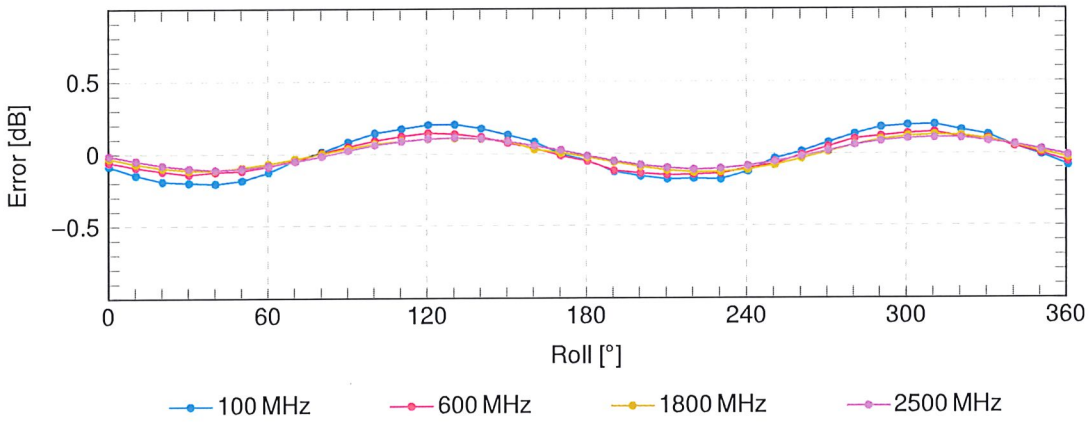
(TEM-Cell:ifi110 EXX, Waveguide:R22)



Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

Receiving Pattern (ϕ), $\vartheta = 0°$





Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)